



MECKLENBURG COUNTY

Land Use & Environmental Services Agency

Code Enforcement

Q&A Consistency Meeting Agenda for Mechanical, July 2017

1. **Question:** If 3 gas appliances are installed under a covered patio, can they all be put under on large hood, or do they need their own hood?

Answer: The hood needs to be matched to the appliance. If the large hood stated it was matched to all 3 of the appliances for simultaneous use, then one hood could be used. This would be very difficult, if not impossible to find a hood that would accept 3 appliances. Individual hoods can be used over each appliance and installed end to end.

2. **Question:** Can a tankless waterheater vent into an open parking deck?

Answer: No, unless the manufacturer's instructions allowed it.

3. **Question:** At what degree of open, does a door closer need to close the door to a mechanical area from a bedroom?

Answer: The technical answer is any degree. There are many different manufacturer's and designs for self closing devices on the market, consideration should be taken when making the inspection that the closer functions as designed.

4. **Question:** Can a PVC pipe run through a return duct for a One- or Two-Family dwelling?

Answer: No, the exception in section 602.2.1 refers to plenums. The definition of a plenum refers to an enclosed area of a building. Section 603 refers to ducts and lists no exception.

PLENUM. An enclosed portion of the building structure, other than an occupiable space being conditioned, that is designed to allow air movement, and thereby serve as part of an air distribution system.

5. **Question:** What refrigeration equipment is exempt from the code?



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Answer: There is not truly an exemption for an refrigeration equipment. Equipment that is factory built, listed and labeled self contained and complies with UL 207, 412, 471 or 1995 is considered to be code compliant and would not require any further inspections other than verification of the UL listing.

1101.2 Factory-built equipment and appliances. Listed and labeled self-contained, factory-built equipment and appliances shall be tested in accordance with UL 207, 412, 471 or 1995. Such equipment and appliances are deemed to meet the design, manufacture and factory test requirements of this code if installed in accordance with their listing and the manufacturer's installation instructions.

6. **Question:** Does a factory built grease duct require a light test?

Answer: Section 506.3.2.5 NCMC only requires the joints assembled in the field to be tested.

506.3.2.5 Grease duct test. Prior to the use or concealment of any portion of a grease duct system, a leakage test shall be performed in the presence of the code official. Ducts shall be considered to be concealed where installed in shafts or covered by coatings or wraps that prevent the ductwork from being visually inspected on all sides. The permit holder shall be responsible to provide the necessary equipment and perform the grease duct leakage test. A light test shall be performed to determine that all welded and brazed joints are liquid tight.

A light test shall be performed by passing a lamp having a power rating of not less than 100 watts through the entire section of ductwork to be tested. The lamp shall be open so as to emit light equally in all directions perpendicular to the ductwalls. A test shall be performed for the entire duct system, including the hood-to-duct connection. The ductwork shall be permitted to be tested in sections, provided that every joint is tested. For listed factory-built grease ducts, this test shall be limited to duct joints assembled in the field and shall exclude factory welds.

7. **Question:** I am designing a project with smoke partitions. I am confused, the code appears to only require dampers in the transfer openings and not in the duct that penetrates the partition. Is this correct?



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Answer: Yes, Section 607.5.7 NCNC only requires a damper at a transfer opening. For the duct penetration, Section 711.7 NCBC would apply; which requires the space around the penetrating duct to be filled with material to limit the free passage of smoke.

607.5.7 Smoke partitions. A listed smoke damper designed to resist the passage of smoke shall be provided at each point where an air transfer opening penetrates a smoke partition. Smoke dampers and smoke damper actuation methods shall comply with Section 607.3.3.2.

Exception: Where the installation of a smoke damper will interfere with the operation of a required smoke control system in accordance with Section 513, approved alternate protection shall be used.

711.7 Ducts and air transfer openings. The space around a duct penetrating a smoke partition shall be filled with an approved material to limit the free passage of smoke. Air transfer openings in smoke partitions shall be provided with a smoke damper complying with Section 716.3.2.2.

Exception: Where the installation of a smoke damper will interfere with the operation of a required smoke control system in accordance with Section 909, approved alternative protection shall be utilized.

8. **Question:** Can a central vacuum system in a condo, located in a highrise, use PVC piping?

Answer: Neither the plumbing or mechanical code addresses central vacuum systems in dwelling units. After discussing with the Building CA; the code prohibits Drain, Waste and Vent pipes in a highrise from being PVC or non-metallic. The code does allow water distribution to be non-metallic piping. The difference is the water distribution is filled with water. The central vacuum lines would be no different than the DWV piping on the pumping system. Based on the intent of the code, the central vacuum piping would need to be metallic if located in a highrise.